Minutes from the U54 APPLICATION BRIEFING TUESDAY, FEBRUARY 19, 2002 1:00PM to 3:00pm Bethesda, Marriott

Comments by Dr. John A. Milner, Chief, Nutritional Science Research Group

- The Nutritional Science Research Group (NSRG) is taking a proactive approach to advancing the understanding of the role of diet in cancer prevention.
- The RFA 03-001 is one indication that interest in how bioactive food components modify cancer within the National Cancer Institute. Recently a concept submitted by another member of (NSRG), Dr. Young Kim, was approved for set-aside funding. This RFA is entitled, "Molecular Targets for Nutrition in Prostate Cancer Prevention". The RFA is 03-003.
- There is considerable information linking dietary habits to cancer incidence and the behavior of tumors. Unfortunately there is also considerable confusion about which food components are most effective in retarding cancer. The numerous inconsistencies in the literature serve as one of the primary justifications for examining genetic variables as determinants of the response to bioactive food components.
- For the purpose of this RFA, a nutrient is defined as an essential or nonessential nutrient. Whatever dietary component(s) is/are selected is expected to bring about a demonstrable effect on cancer at exposures/concentrations that would be expected to occur naturally in some parts of the world.
- The 03-001 RFA is designed to facilitate the creation of interdisciplinary teams to address specific mechanisms by which nutrients modify genetic pathways involved with cancer.
- The research approach may involve either genetic or epigenetic events or both, but must be related to nutritional modulation as a factor in cancer prevention.
- The objective is again to create interdisciplinary collaborations to unravel complex issues about how a nutrient(s) modify events involved with cancer.
- Since this is supported by a U54 mechanism, there will be some NCI involvement. This involvement will be to encourage collaboration within and across those funded by this mechanism.
- Considerable flexibility has been provided in the approach that can be taken. A given nutrient does not have to receive the entire focus. Teams

may examine commonalities and disparities in the actions of nutrients as modifiers of specific genetic or epigenetic events. Likewise, the focus can be on a single nutrient as a determinant of multiple genetic changes. Clearly each application will be based on the logic for the proposed investigations and thus will build on existing data and not therefore be seeking new and novel dietary factors as modifiers of cancer risk.

- Teams may develop a concept that focuses on multiple nutrients as modifiers of genes involved with carcinogen metabolism or may focus on nutrients as modifiers of tumor behavior. Applications are not limited to modifiers of tumor incidence, but may address genes involved with cell division, differentiation, apoptosis, etc.
- If multiple genes are involved in the response to a nutrient, attention should be given to determine which is the most important in explaining a change in tumor incidence or in the phenotypic change.
- Applicants really need to focus on an integrated approach to define relationships between a nutrient(s) and genetic pathways. Spelling out the essential and unique components of the application will be critical.
- This is not meant to be data gathering project, but a project to answer pertinent questions. Teams have to determine what questions they are going to address, i.e. what nutrient, what genes, etc.
- The purpose of the RFA is to examine the impact of bioactive food components on genes, not food on genes.
- Be creative in finding the best people to create a team. Teams can be global, except the PI, who must be domestic.

Comments made by Dr. Mary Jane Slesinski

- Reviewing grants is the best way to improve your grantsmanship.
- Pilot projects should not be as detailed as regular projects. Regular projects are the R01's. Individual projects will be scored, pilot projects will not. Pilot projects will be reviewed as a unit to show your familiarity with the field as well as expertise in the field of study.
- Pilot projects will not have individual budgets, one by one.
- There will be collaboration with intramural scientist at the NIH, but the collaborating scientist may not receive salary, equipment or supplies. All of this information is in the RFA.
- Send (1) original and (3) copies to the Center for Scientific Review at the address in the RFA. The two additional copies will come to the referral office.
- You no longer can you hand carry the RFA. Do not use regular mail, you
 must use express mail service.
- Look at the proper address. The mail and express mail addresses are different, so please take note.
- The table of contents is crucial.

- Those submitting applications are reminded that anything that annoys the reviewer will likely result in a lower score. Avoid typing and formatting errors. Application should be judged on scientific approach and value and not typos and other distractions.
- You may request that certain people not review. Request this in the cover letter.
- Individual projects will get a numeric score on significance, innovation, investigation and environment. This is spelled out in the RFA.
- Please review page (18) and (19) for required information about the
 protection of human subjects. You must provide information about how
 subject anonymity will be protected, how the data will be protected, who
 will have access to the data, when will access be allowed to the data, and
 what will prevent others from having this access. This topic must be
 covered thoroughly.
- IRB approval is not necessary up front but will be before any award could be made.
- A letter of intent is desirable since it provides some clue about who might be submitting an application. Although not absolutely required, we appreciate the forewarning about likely submission.

If those who attended have questions for Ms. Priscilla Grant, please contact her at:

Priscilla Grant Grants Mgmt. Spec. (301) 496-3160 (301) 496-8601 fax pg38h@nih.gov (e-mail)

If there are questions that have not been addressed in the minutes, please feel free to contact Dr. Milner at (301) 496-0118 e-mail: milnerj@mail.nih.gov.

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